

# **PATTON, THIRD ARMY AND OPERATIONAL MANUEVER**



**A MONOGRAPH  
BY  
Major Jack D. Flowers  
Infantry**

**School of Advanced Military Studies  
United States Army Command and General Staff  
College  
Fort Leavenworth, Kansas**

**Second Term AY 97-98**

Approved for Public Release Distribution is Unlimited

**DTIC QUALITY INSPECTED 4**

**19981207 076**

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE 21 May 1998	3. REPORT TYPE AND DATES COVERED Monograph		
4. TITLE AND SUBTITLE PATTON, THIRD ARMY AND OPERATIONAL MACHINERY		5. FUNDING NUMBERS		
6. AUTHOR(S) MAJ JACOB D FLOWERS				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) School of Advanced Military Studies Command and General Staff College Fort Leavenworth, Kansas 66027		8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Command and General Staff College Fort Leavenworth, Kansas 66027		10. SPONSORING / MONITORING AGENCY REPORT NUMBER		
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE: DISTRIBUTION UNLIMITED.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) SEE ATTACHED				
14. SUBJECT TERMS PATTON, FM 100-5, STAFF, PLANNING			15. NUMBER OF PAGES	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UNLIMITED	

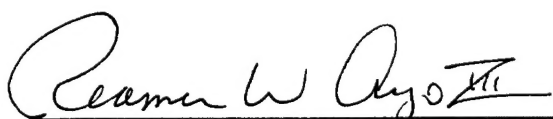
SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

Major Jack D. Flowers

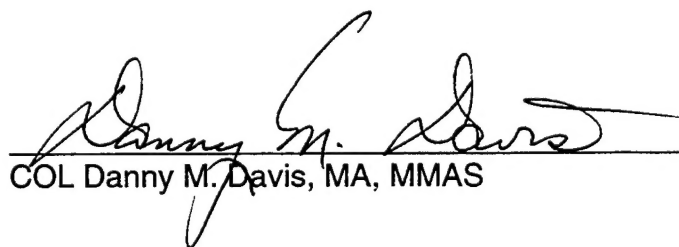
Title of Monograph: *Patton, Third Army and Operational Maneuver*

Approved by:



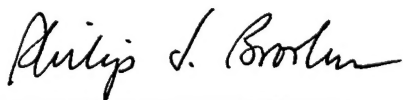
LTC Reamer W. Argo, MEd

Monograph Director



COL Danny M. Davis, MA, MMAS

Director, School of Advanced  
Military Studies



Philip J. Brookes, Ph.D.

Director, Graduate Degree  
Program

Accepted this 21st Day of May 1998

## ABSTRACT

On 16 December 1944, the German Army launched an offensive in the Ardennes to split Allied forces and retake the ports of Antwerp and Liege. The German advance split the XII Army forces and left the 101st Airborne Division surrounded at Bastogne. To relieve the encircled units in the Ardennes and defeat the German offensive, Third Army conducted an impressive counterattack into the flank of the Germans. The flexibility to turn ninety degrees during the worst winter in thirty-eight years and relieve the encircled forces stands out as one of the greatest operational maneuvers in history. While this operation is unique, the actions of the commander and staff that planned and executed it deserve closer analysis to determine what enabled them to orchestrate this maneuver. It is especially remarkable, when taken in context, how rapidly the Army changed during the previous four years.

The US Army anticipating eventual war in Europe began a transformation which included drastic changes in force structure and doctrine. The primary transformation in doctrine was the revision of Field Service Regulation 100-5. The 1941 edition of 100-5 superseded a tentative version published in 1939 which was the first major revision of warfighting doctrine since 1923. It was with this manual that the Army went to war. It was also the manual used to train and teach new and reserve officers who had little experience in the study and practice of war. How important and to what extent did Patton's Third Army apply the doctrine in conducting the Battle of the Bulge?

Particularly relevant to serving officers today is to analyze the operations of Third Army in terms of doctrine that existed in 1944 and today's current doctrine. An examination of similarities and differences between the doctrines may allow development of possible conclusions on the ability of future forces to conduct decisive maneuver in compressed time and space.

This monograph sought to answer the question does current operational doctrine place enough emphasis on the art of command to ensure flexibility in the execution of operational warfare?

The findings of this monograph suggests that the Army should consider refining the emphasis placed on the art of command in the current doctrinal manuals FMs 100-5 and 101-5. Additionally, more doctrinal emphasis should be placed on fulfilling commander's information needs. More controversial would be to allow increased latitude by commanders in selection of their staff officers. While some will argue this is cronyism, it exist at some levels in certain sub-communities of the Army already. If commanders could pick subordinates that are familiar with and understand how the commander thinks this has the potential increase the effectiveness of unit operations.

# **TABLE OF CONTENTS**

## **I. INTRODUCTION 1**

**Research Question 3**

## **II. REVIEW OF DOCTRINE AND DECISIONMAKING THEORY 5**

**Field Service Regulation 100-5 and Field Manual 100-5 5**

**Command and Leadership 5**

**The Staff 8**

**Planning and Estimates 11**

**Field Service Regulation 101-5 and Field Manual 101-5 12**

## **III. THE ARMY, STAFF AND COMMANDER 18**

**Third Army 18**

**The Staff 21**

**Patton 25**

## **IV. CONCLUSIONS 31**

**Conclusions 31**

**Recommendations 32**

## I. INTRODUCTION

On 16 December 1944, the German Army launched an offensive in the Ardennes to split Allied forces and retake the ports of Antwerp and Liege. The German advance split the XII Army forces and left the 101st Airborne Division surrounded at Bastogne. To relieve the encircled units in the Ardennes and defeat the German offensive, Third Army conducted an impressive counterattack into the flank of the Germans. The flexibility to turn ninety degrees during the worst winter in thirty-eight years and relieve the encircled forces stands out as one of the greatest operational maneuvers in history. While this operation is unique, the actions of the commander and staff that planned and executed it deserve closer analysis to determine what enabled them to orchestrate this maneuver. It is especially remarkable, when taken in context, how rapidly the Army changed during the previous four years. It was only four years prior that the Army had to mobilize from a small, peacetime organization mainly concerned with garrison activities to a large warfighting organization with new force structure such as armored and airborne divisions.

The US Army, anticipating eventual war in Europe, began preparing by updating force structure and doctrine resulting in drastic changes to both. The primary transformation in doctrine was the revision of Field Service Regulation(FSR) 100-5. The 1941 edition of FSR 100-5 superseded a tentative version published in 1939 which had been the first major revision of Army warfighting doctrine since 1923.<sup>1</sup> The 1941 edition of FSR 100-5 was the manual used by the Army when the United States went to war in December of 1941. This manual was key and significant because it was used to train the large number of new officers in the expanding Army who had little experience in the study and practice of war. How important and to what extent did Patton's Third Army apply the doctrine in conducting the Battle of the Bulge?

Analyzing Third Army's operations in 1944 by comparing and contrasting that doctrine to current doctrine is particularly relevant to serving officers today is to analyze the operations of Third Army in terms of doctrine that existed in 1944 and today's current doctrine. An examination of similarities and differences between the doctrines

may allow development of possible conclusions on the ability of future forces to conduct decisive maneuver in compressed time and space.

### **Research Question**

Does current Army operational doctrine as outlined in FM 100-5 place enough emphasis on the art of command to allow flexibility in the execution of operational warfare?

To answer the research question, this monograph will examine current doctrine focusing on the role of the commander and staff in the orders and estimate process at the operational level and compare it to operational doctrine during W.W.II., specifically Patton's Third Army operations during the Battle of the Bulge. To ensure thorough review in the effort only two manuals from both periods will receive detailed review. Additionally since joint doctrine from WWII is unavailable, an in-depth review of current joint doctrine is not included. The monograph will also look at the key players in Patton's Third Army focusing on the commander, Chief of Staff (COS), G2 and the G3 to determine how their relationship did or did not impact on the Army's ability to conduct decisive operations. Specific efforts are: review doctrine to determine

similarities and differences between planning doctrine during W.W.II and the present; evaluate historical examples as it applies to the current version of FM 100-5 and doctrine in use at the time of the operation; review historical changes in operational doctrine to help identify current effectiveness of adopting and integrating current doctrinal methods.

## II. REVIEW OF DOCTRINE AND DECISIONMAKING THEORY

Doctrinal manuals of the 1940's were often "Field Service Regulations." To promote clarity throughout this monograph these are identified as "FSR" and followed by the appropriate number.<sup>2</sup>

I will focus my review of doctrine on two publications, FSR 100-5 and FSR 101-5, emphasis placed on the commander, the staff, the estimate and the orders process. FSR 100-5, Operations, published in May 1942 and FSR 101-5, Staff Officers' Field Manual, published in August 1940 were the manuals used by General Patton and his staff in December 1944.<sup>3</sup> The review will also include an overview of the current FM 100-5<sup>4</sup> and FM 101-5 for comparison with the earlier doctrine.

### ***Field Service Regulation 100-5 and Field Manual 100-5 Command and Leadership***

George C. Marshall, Army Chief of Staff (CSA), makes clear in the introduction of FSR 100-5 that it is the manual that "constitutes the basis of instruction of all arms and services for field service".<sup>5</sup> Marshall is careful to note that while FSR 100-5 is the basis for conducting operations, avoiding set rules and principles are essential for

the success of combat operations and knowledge combined with experience in applying the doctrine is critical for a firm "base of action".<sup>6</sup> Marshall closes the introduction by stressing the importance of the commander with "It is the function of command to coordinate all the various actions of the forces employed to facilitate the teamwork essential to success".<sup>7</sup>

What makes these statements of particular importance is the introductory remarks on the same page as the authentication, By Order of the Secretary of War: G.C. Marshall, Chief of Staff. This gives the appearance that these are the expressed thoughts of Marshall. It allows the inference that the most important ideas of the manual in the mind of the CSA are these expressed here in five short paragraphs and that what follows meets with his expressed views on how the Army should fight. It is significant that Marshall focuses exclusively on command and leadership and did not address other areas. It demonstrates that for him these were the qualities that would produce success in warfare.

By contrast, the five paragraphs contained in the preface of FM 100-5 contain no remarks about leadership or command. Even in the two page introduction only one sentence even mentions command and another separated by almost a page mentions the "high quality of leaders".<sup>8</sup> Additionally, the authentication is on the last printed page and is unnumbered. While it is arguable that mere administrative changes such as the location of authentication is insignificant, it is readily apparent that the emphasis of FSR 100-5 was on leadership and a reasonable inference drawn that the authentication gives the appearance as a directive from the CSA.

FSR 100-5 begins the separate chapter on leadership with the conclusion that "Leadership is based on knowledge of men".<sup>9</sup> It concedes that while other instruments of war may change, man and the ability of leaders to understand his behavior is key to: "successful planning and in troop leading".<sup>10</sup> FM 100-5 recognizes leadership as the "most essential dynamic of combat power"<sup>11</sup> rather than a separate component of operations. Both manuals clearly state that leadership forms the integral part of

maintaining morale and thus the combat effectiveness of Army units.

Both FSR 100-5 and FM 100-5 address command and its components and responsibilities. Both continually reiterate the theme that command consists of two components, leadership and character. The components according to FSR 100-5 "command and leadership are inseparable".<sup>12</sup> It argues that the exercise of command at all levels requires a commander who is the "controlling head; his must be the master mind, and from him flows the energy to animate all under him".<sup>13</sup> It is the commander who is responsible for decision making.

While both manuals stress the importance of leadership and command FSR 100-5 places the emphasis on these qualities in a more straightforward manner. This shows where the focus was for the capstone warfighting manual of WWII.

#### **The Staff**

FSR 100-5 defines the role of the staff as to,

"Assist the commander, *to the extent that he may require* (italics added), including providing information, data, and advice; preparing detailed plans and orders in accordance with his direction; and supervising over the execution of these orders as the commander may prescribe."<sup>14</sup>

The emphasis on the requirement of the staff to provide information varies from commander to commander. A Rand study, in determining commanders' information needs, found four elements that define a commander's information needs<sup>15</sup>. The first is the particular situation that the commander finds himself in. Different situations require different and often unique information needs. Second, is the organization of the command post. What staff agencies are represented and their levels of competence and ability to process and present the information drove what a commander asked and expected. Next, was the relation of the commander and his subordinate commanders. If the commander was comfortable with the subordinate he was less likely to require information from them. Conversely, if he perceived that certain subordinate commanders were less capable he required a great amount of information. Last was the commander's image or his visualization of the situation. A persons image or "mental model" is the most difficult to achieve an understanding of because often the commander himself is not sure of the model he is operating from. These mental models are

"deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action"<sup>16</sup>. A commander's mental model determines not only the type of information he requires but how he assimilates that information into his situational awareness. If a commander is convinced that the enemy will adopt a certain course of action no amount of information presented will change his perception. It is possible that he will not even realize relevant information because of his preconceived idea. This image of the commander is addressed in Army doctrine as visualization.

Combined with visualization and key to the commander in decisionmaking is intuition. Intuition may be defined as: "Gut feeling or intuitive beliefs that stem from rapid thinking at the subconscious level." Intuition is gained through experience, training, and education. Intuition is itself a process. While many people make the correct intuitive decision almost instantaneously and with seeming little thought, most of these decisions in hindsight followed a rational thought process that occurred so quickly the decision maker did not

recognize the process. A former commander of the Battle Command Training Program (BCTP), and the Center for Army Tactics (CTAC) found during AAR's when a commander was asked why he took a certain action the response was "if felt right." When he engaged them in a deeper analysis he found that often they had been in a similar experience or remembered a similar experience they had studied and that this was the basis for their actions<sup>17</sup>.

### **Planning and Estimates**

Both FSR 100-5 and FM 100-5 address the commander's responsibility for the planning process and the need to conduct estimates to support a decision. FSR 100-5 states " the commander must quickly evaluate all available information bearing on his task, *estimate the situation*, and reach a decision" (*italics in original*).<sup>18</sup> It then goes on to elaborate that this process is dependent on the commander and his willingness to act. "In campaigns, exact conclusions concerning the enemy can seldom be drawn ... to delay action shows a lack of energetic leadership."<sup>19</sup>

The commander must also consider the possible enemy actions but "guard against the unwarranted

belief that he has discovered the enemy's intention" and ignore other possible enemy courses of action.<sup>20</sup>

FSR 100-5 continually stresses the need to maintain flexibility. The estimate of the situation is a continuous process and "stubborn adherence to a previous decision may result in costly delay, loss of opportunity for decisive action, or outright failure".<sup>21</sup>

Commanders' decisions are "communicated to subordinates by clear concise orders, which gives them freedom of action appropriate to their professional knowledge and the situation".<sup>22</sup> The last part of this passage is particularly related to the commander. Since various subordinate commanders differ in professional abilities, a commander should tailor his orders accordingly. Recent studies show that commanders routinely do this.<sup>23</sup>

### ***Field Service Regulation 101-5 and Field Manual 101-5***

Both Field Service Regulation, FM 101-5, Staff Officers' Field Manual, and FM 101-5, Staff Organizations and Operations expound and amplify the role of the staff as outlined in FSR 100-5 and FM 100-5. FSR 101-5 outlines the duties and relationships of members of the "general, "special," and "personal" staff officers.<sup>24</sup> FM

101-5 defines each much in the same way except the general staff replaces the coordinating staff and the personal staff expands when compared to FSR 101-5. It also provides for certain "checklist" in the conduct of different operations similar to what many units of today use in the form of Standard Operating Procedures (SOP) or "battlebooks".

Both of these manuals also outline the planning process and how to complete estimates. FSR 101-5 treats the estimate or decision making process different from FM 101-5.

FSR 101-5 identifies five steps in the commanders estimate of the situation.<sup>25</sup> First, he considers his mission. What is the mission to accomplish?. Next he considers the situation. This includes an analysis of terrain, relative combat power, time and space, status of units, etc. It also includes the enemy capabilities and friendly dispositions. Third, the commander conducts an "analysis of possible lines of action". Next, the commander conducts a comparison of possible actions weighing the advantages and disadvantages of each. Fifth and finally, he makes a decision.<sup>26</sup>

The staff also conducts an estimate. It is not the same as the commander. For example, the G2 prepares an estimate. The focus of this effort is to draw conclusions with sufficient justification to recommend an enemy probable course of action.<sup>27</sup>

What makes the doctrine different from today's current Military Decision Making Process (MDMP) is that the earlier doctrine placed the onus for the decision making process on the commander. Although today's doctrine in FM 101-5 states that the process is a commander's process that he is responsible for, in reality it is a staff process that provides the commander with mountains of information much of which he does not need to make a decision.<sup>28</sup> The earlier doctrine assumed a more active role in the process than most commanders now take. Patton's G2 gives two specific examples on how he supported the commander's information needs during the planning process.

The first was in Sicily where Patton asked him if, "I attack Agrigento, will I bring on a major engagement?"<sup>29</sup> The response from the G2 was an immediate "No, Sir." Patton turned to the G3 and told him to issue the order.<sup>30</sup>

The second was during the Battle of the Bulge. On either late the evening of 19 December or early on 20 December Patton was meeting with Bradley. He once again summoned the G2 and asked if they should even hold Bastonge. Again the G2 reply was an immediate "yes" and then he gave a short reason why based on a detailed analysis stressing that it was an important road network for both sides to support logistically the tactical operation. "Patton nodded to Bradley. I departed."<sup>31</sup>

This demonstrates not only a commander who knows the information he seeks but a brilliant staff officer who had done the detailed analysis and could offer timely recommendations to the commander.

This differs from today's usual decisionmaking process. FM 101-5 specifies seven steps in the MDMP. They are substantially the same as the earlier process. The key difference is that it is a staff process, with minimal commander involvement as opposed to a commander's process with minimal staff involvement. Doctrine does recognize that the process can be abbreviated based on time and the capability of the staff.<sup>32</sup> Some would suggest that

this change is necessary to deal with the complexity of warfare.

Complexity is the functioning of systems made up of "a great many agents interacting with each other in a great many ways."<sup>33</sup> Complex adaptive systems operate in the area of complexity and exhibit three characteristics. They display the ability to organize themselves, they adapt and they exist at the "edge of chaos"<sup>34</sup>. Dynamic complexity is the functioning of systems with many parts that act in an inconsistent manner. The systems many parts are constantly changing and the interaction produces unpredictable outputs.

The Army of today is certainly a complex adaptive system, but so was the Army in WWII. Just as we deal with the sophisticated systems of today, the tank was no less complex to the young man in 1944 who had never flown on an airplane or driven a car. We were developing new doctrine to deal with the changing face of warfare. Airborne operations and coordination of ground and supporting air assets were as new to that Army as operations in Bosnia are today. In fact, historically the Army has conducted more operations that resemble Bosina.<sup>35</sup> Complexity

is relative to the time and place. Was it more complex to deploy units to Saudi Arabia than it was to deploy them to North Africa in 1942? While each was a challenge, they were both hampered by "a great many agents interacting with each other in a great many ways."<sup>36</sup>

Earlier and current doctrine seeks to make operations function in an orderly and controlled process. The primary difference is that earlier doctrine placed more emphasis on the role of the commander. The doctrine of WWII dictated that the staff prepared estimates in support of the commanders estimate. The commander would issue guidance and the staff would then do the detailed work of translating the commander's vision into control mechanisms, that is, orders to subordinate units. A review of how Third Army implemented this doctrine may lead to conclusions on the effectiveness of the doctrine.

## **II. THE ARMY, STAFF AND COMMANDER**

While doctrine provides the foundation for conducting operations, to understand the ability of a specific operational unit it is necessary to understand three key components: the unit, staff, and the commander. These elements provide both the means and the methods for conducting operations.

### ***Third Army***

Third United States Army (TUSA) was activated four days after the end of World War I on 15 November 1918 and served as an occupation Army in Germany until deactivation in July 1919. Reactivated in 1932 it served as a command for forces in the Southern part of the US.<sup>37</sup> From the outbreak of war until its activation as a Combat Army effective 31 December 1943<sup>38</sup> TUSA was a training command responsible for conducting training for deploying units at Camp Polk, LA. Prior to arriving at Camp Polk, these units successfully completed three phases of training at home station. These four phases consisted of Individual, Company Level, and the "D" level where battalions and regiments operated together. The fourth phase was a "force on force" exercise.<sup>39</sup> It provided the equivalent of

both the Battle Command Training Program (BCTP) when it conducted seminars with staffs at mobilization sites and as an Operations Group at today's Combat Training Centers.

Lieutenant General Walt Krueger commanded TUSA from the original Louisiana Maneuvers in 1941 until General Douglas MacArthur requested his service in December 1941. It was Krueger who instituted the forerunner of today's formal, "high-tech" After Action Review (AAR). He would gather all the officers and non-commissioned officers in the camp theater and then the forerunner of today's Observer/Controller (O/C) would present a detailed overview complete with colored slides and photographs to illustrate major point of success, but more importantly of failure to review the maneuver of the major subordinate units involved in the exercise. Each major subordinate commander would then state his view of how the operation went. The session concluded with Krueger giving a detailed analysis of each unit's operation.<sup>40</sup>

Although these AARs proved tremendously effective, other training commands did not adopt them and the new commander LTG Courtney Hodges

discontinued them. Hodges made the AAR the sole responsibility of the training units who had little time or expertise to put together as effective critique as TUSA did under Krueger.<sup>41</sup>

The advance detachment arrived in England 28 January 1944. However, the TUSA command group AAR begins with designation of Patton as commander on 26 January 1944.<sup>42</sup> There is a valid reason for this. TUSA actually began Phase I of a four phase planning effort once Patton assumed command.<sup>43</sup> Many of the key planners arrived in England in time to establish the headquarters by 1 March.<sup>44</sup>

Upon the arrival of the main body the Chief of Staff (COS) and all the primary staff officers were relieved prior to leaving the ship and given orders to other commands.<sup>45</sup> Patton replaced these officers with those he was familiar with and had worked with on other occasions. It is helpful to review the background of several key officers. These officers would be the cornerstone of Patton's Army for the campaign to destroy Germany. Patton's relationship with these key staff officers provided the foundation for success in TUSA.

### **The Staff**

The initial choice of Patton for COS was BG Hobart "Hap" (short for Happy) Gay. Gay had a superb background to serve as COS. Originally commissioned as a reserve cavalryman in 1917 he was integrated in to the regular Army two months later. He served in various positions in the cavalry including instructor duty at Fort Riley for four years. Gay also served in Quartermaster assignments beginning in 1929 and continuing until his appointment as COS Western Task Force for Operation TORCH in 1942.<sup>46</sup>

Gay and Patton were almost certainly initially acquainted as early as 1924 when both were serving at Fort Riley.<sup>47</sup> Their close association began at Fort Myer in 1939 and would continue until Patton's death.<sup>48</sup>

Eisenhower did not approve of Patton's choice of Gay as COS and basically ordered him to choose a replacement. Some authors have speculated that a lack of General Staff experience prior to the war and the fact that he was neither a West Pointer or a graduate of the Command and General Staff College led to the lack of confidence by Eisenhower who was surely influenced by his own COS Walter "Beetle" Smith.<sup>49</sup>

Patton chose MG Hugh Gaffey to replace Gay. Gaffey was originally commissioned a Field Artilleryman in 1917. He served in various artillery positions throughout his career and had served as COS for Patton in II Corps. Following this duty he commanded the 2nd Armored Division and then returned to England to assume TUSA COS. He would serve in this position until he assumed command of 4th Armored just prior to the Battle of the Bulge.<sup>50</sup>

The G2 for Patton was Colonel Oscar Koch. Koch was also a former Cavalryman and a reserve officer whom first served with Patton at Fort Riley. He was initially the COS of Task Force Blackstone when Patton invaded French Morocco and went with Patton to II Corps as the G2. He would remain with Patton until the end of the war as his G2 in each subsequent command.<sup>51</sup>

Patton's Deputy COS (DCS) for Operations, COL Paul Harkins, was another old friend and cavalryman. Again the association began at Fort Riley. Additionally, Harkins was a troop commander for Patton at Fort Myer when Patton commanded the 3rd Cavalry. He was the G3 of 2nd Armored Division and

would rejoin Patton as the DCS Operations of the Western Task Force. Like the rest he would remain with Patton until the end of the war.<sup>52</sup>

COL Halley Maddox, Patton's G3, was another officer Patton brought from Seventh Army.<sup>53</sup>

Patton's staff was the envy of no one else in the European Theater of Operations (ETO). They were for the most part initially commissioned as reserve officers, not graduates of CGSC, and cavalrymen. "I do not need a brilliant staff, I need a loyal one," Patton remarked to Eisenhower when questioned about the abilities of his staff.<sup>54</sup> Omar Bradley remarked that:

"Indeed, I had once agreed with the observation of another senior commander who said. 'Patton can get more work out of a mediocre bunch of staff officers than anyone I ever saw.' His principles were almost without exception holdovers from the Sicilian campaign where their performance could be most charitably described as something less than perfect. However, five months in Europe had seasoned that staff and the greatly matured Patton succeeded in coaxing from it the brilliant effort that characterized Third Army's turnabout in the Bulge".<sup>55</sup>

This back-handed compliment shows the lack of recognition afforded both Patton and the staff. While "five months in Europe" contributed to their success, both Patton and his staff had planned in

detail the operations of TUSA since they formed in England.

Koch related that soon after he arrived in England Patton had called him to the map and directed him to focus his efforts on Metz. Koch stated:

"In broadest terms, Patton had just stated his EEIs-Essential Elements of Information-for the planned Third Army offensive on the European continent. Although I didn't know it then, he had just concluded what was to be his only personally-expressed intelligence directive, not only for the cross channel invasion in Overlord, but for the rest of Third Army's operations in Europe until the war's end...the task facing my staff was clear. Anything that might affect the Third Army mission, from the coast of France all the way to Metz was now of critical concern."<sup>56</sup>

Koch went on to state that meant the commander focused on what the Army today labels as METT-TC since he also included on his list of things " the status of public utilities and civilian attitudes".<sup>57</sup>

This illustrates how Patton clearly possessed operational vision well prior to the invasion and that his staff was capable of receiving guidance and turning it into information useful to the commander.

Another example of the staff's ability before the invasion was their ability to conduct detailed analysis. The TUSA G2 "Estimate NO. 1" was published only a month later not only contained

detailed information on the situation on the continent (to include the Eastern Front) down to regimental level, it also provided the analysis that the situation was "too obscure to prognosticate further".<sup>58</sup>

### **Patton**

Patton's life and career are one of the most written about of any other US Commander. Both his supporters and detractors would find it hard not to agree with Carlo D'Este characterization that he was "a genius for war".<sup>59</sup> He spent his entire life studying war. Patton possessed the ability to both grasp the art and science for command. His focus on the art was the ability to visualize and operation and then pass this vision on to his staff and subordinates. His guidance to Koch prior to the invasion is just one example of his ability to visualize.

Visualization is the process of developing a clear understanding of friendly forces in relation to the enemy, seeing a desired end state, and visualizing the sequence to achieve the end state from the current disposition<sup>60</sup>. The ability to visualize is a component of the "art" in warfare, not the science of it.

Our current doctrine states, "Commanders' intuition, training, and experience—coupled with digital technology will enable them to visualize the operation."<sup>61</sup> The planning process improves with the ability to conceive and scrutinize friendly and enemy courses of action. Commanders can convey their intent and supervise the operation to ensure that their intent and vision executed. Patton used this same ability relative to the current technological capabilities of the time.

Patton was rarely in his headquarters. He was constantly on the move and depended on communications and his staff's ability to execute his intent. Patton held two daily meetings in TUSA. The first was a 0800 and usually only involved himself, COS, XIX Tactical Air Commander and his COS, the DCS, the G2 and the G3. This meeting rarely lasted more than fifteen minutes. The G2 would give his estimate of enemy capabilities and then the staff would brainstorm playing the "what if game".<sup>62</sup> Koch remarked:

"This early hour exchange led to a most fruitful exchange of ideas. But of even greater importance, it made everyone there aware of what the commander had in mind, what he should do under various circumstances that might arise. The staff was kept up to date with Patton's thinking

on a daily basis. Future plans were laid and made known and an intimacy of thinking developed. At the same time, many items were covered whose relative importance would not justify calling a special staff conference during the day."<sup>63</sup>

This once again shows that it was not the five months and Patton's maturing as Bradley suggests, but a commander capable of articulating his vision and of a competent staff who could take that vision and translate it into executable orders to subordinates.

Following this meeting what we today call the "Battle Update Brief" (BUB).<sup>64</sup> This meeting involved about forty personnel representing all primary and special staff sections. The principles who attended the meetings rarely spoke. The G2 briefer would begin followed by the G3 briefer. Both gave short updates not for the benefit of Patton or to show their "big brains," but to ensure that all sections were aware of the current situation. The staff posted administrative and logistics information but they only responded to questions rather than briefing the information. Patton also had staff officers who had visited the units the day prior update him on their actions and needs. The entire meeting rarely lasted longer than twenty minutes.

The briefing "was entirely functional...no window dressing...everyone knew what was going on everyday".<sup>65</sup>

While Patton expected his staff to plan he focused on execution. In his Letter of Instruction No.1, he stated that for commanders,

"10 percent of your time is on the promulgation of the order. The remaining 90 percent consists of ensuring by means of personal supervision on the ground, by yourself and your staff, proper and vigorous execution".<sup>66</sup>

Later in the same letter he directed the orders process for TUSA.

"Formal orders will be preceded by letters of instruction and by *personal conferences*. (Emphasis added). In this way the whole purpose of the operation will be made clear, together with the mission to be accomplished by each major unit. So that if during combat, communication breaks down, each commander can and must so act as to attain the general objective. The order itself will be short, accompanied by a sketch--it tells what to do not how."<sup>67</sup>

This method of conducting conferences was Patton's way of conveying his intent. He would often issue directives to commanders in person and then either he or a staff member accompanying him would inform TUSA and then they would write the order to confirm the verbal order. A review of orders issued for the

Battle of the Bulge is typical of TUSA orders throughout the war.

TUSA issued its first Operational Directive on 20 December. It was one page long. Its primary purpose was to change task organization and stage forces for the operation. The next order appeared on 21 December and was the document that issued objectives to subordinate units for the execution of the relief of Bastonge. It was one and a quarter pages long. It was only amended once and that was to change task organization to send the 11th Armored Division to theater reserve on 26 December. No other orders were issued until after 28 December when Bastonge was relieved except to VIII Corps for what was mainly a task organization change to allow them to assume a larger defensive sector in support of the operation.<sup>68</sup> This ability to produce concise, clear, and short orders is a reflection of the efficiency of the TUSA staff and Patton himself.

Patton was not considered a good staff officer and in fact received less than glowing efficiency reports when he had previously served in those positions.<sup>69</sup> He had served as a G1 and G2 (twice in both cases) during the period between the wars.

Patton never served as an operations officer.

Patton was not a brilliant staff officer. He was a brilliant commander and the ability of his staff to operate effectively was based on their understanding of his intent. Patton was a master at the art of visualizing the battle and through this visualization he was able to focus the efforts of his staff to achieve the mission.

## IV. CONCLUSIONS

### **Conclusions**

Carlo D'Este concludes:

"With Patton in command would there have been a Battle of the Bulge? At the very least, it might have been a vastly different battle. It seems likely from what we know that Patton would not simply have ignored the mounting evidence of an impending German offensive, and would not have waited for the Germans to attack before taking his own countermeasures."<sup>70</sup>

The key to success in Patton's Third Army was the combination of a decisive and active commander combined with a competent and capable staff. Patton's G2 reported as early as late November that the Germans were not defeated and still possessed the capability to counterattack.<sup>71</sup>

Patton selected staff officers he was familiar with and who possessed backgrounds similar to his own. This familiarity of the staff with the commander allowed them to tailor the information to support his operational needs.

Patton's ability to understand his situation and then provide the staff with a clear visualization of the forthcoming battle led to their ability to conduct operations in a timely and efficient manner.

Additionally, because of this ability the staff did not overburden Patton with information.

Patton's ability to visualize the battlefield and translate it into orders to the staff was another reason for his success. Patton had practiced this art throughout his career and took every opportunity in peacetime to conduct self-development. This included using off-duty hours to learn and develop the skills necessary to increase his military knowledge and problem solving ability.<sup>72</sup> Patton prepared himself in peacetime to ensure that when called he would have the skills necessary to succeed in war.

### **Recommendations**

This monograph sought to answer the question does current Army operational doctrine as outlined in FM 100-5 place enough emphasis on the art of command to allow flexibility in the execution of operational warfare?

The findings of this monograph suggests that the Army should consider refining the emphasis placed on the art of command found in the current doctrinal manuals FMs 100-5 and 101-5. Specifically, doctrine should focus more on content rather than process. The ongoing and continuous debate about what the

commander's intent should include is a good example of focusing on product rather than content. It is the *commander's intent* (emphasis added). If he clearly articulates his vision and it focuses the staff it should not matter whether it is bulleted or in paragraph form. This is especially true the higher the echelon of command where the operational art is more fully practiced. Most primary staff officers and subordinate commanders working for an operational level command have at least eighteen or more years of service.<sup>73</sup> While both FM 100-5 and FM 101-5 state that the MDMP is the responsibility of the commander in execution during training exercises it is the process(MDMP) that is used to measure success rather than focusing on the need for the commander to articulate his vision to staff officers. It is the job of the commander to focus the efforts of the staff.

The emphasis Marshall placed on command and leadership should be reflected in our current and future versions of FM 100-5. This would raise the level of emphasis on the commander's responsibility in our capstone warfighting manual. As the capstone manual it is the basis for developing doctrine for

all tactical units in the Army. This will result in more emphasis on command and leadership at all levels in the Army.

Additionally, more doctrinal emphasis should be placed on fulfilling commander's information needs. These information needs are individually unique to the commander. As the Rand study concluded it is based on four factors.<sup>74</sup> Doctrine in FM 101-5 provides a "checklist" to guide the commander in providing guidance to the staff. This "guidance should be tailored to meet specific needs".<sup>75</sup> These "needs" should be what he needs to make a decision.

Information is useless unless it is relevant to the situation. Commanders rely on information to begin the decision process. Once he receives this information, a commander must rely on other factors to give relevance to that information. These factors include his environment, his mental model, and intuition. Information is relevant only considered with these other factors. Determining what information commanders need is critical to the planning process.

"The collection, processing and dissemination of relevant information is the key to achieving

situational awareness throughout the force, which creates the opportunity for unity of effort toward mission accomplishment"<sup>76</sup>. FM 100-6 defines information as data collected from the environment and processed into a usable form. When data is processed or placed into a situational context only then does it become information<sup>77</sup>.

When commanders receive too much information complexity increases and his capacity to process the information is limited. They narrow their focus too much and are unable to see the entire problem.

Commanders who try to absorb the overwhelming amount of information that occurs in either a training environment or combat will overlook critical information. The commander must establish Commander's Critical Information Requirements (CCIR) and focus only on those limited issues that actually require him to make a decision. These CCIR's should be framed in the context of a question. They should not merely seek to ask for more information. The examples of Koch's input on two key decision for Patton are an outstanding example how a commander should phrase this information.

"Sometimes commanders suffer from inadequate training, education, experience or intuition."<sup>78</sup> Patton suffered from none of these deficiencies. This is the real challenge and must be the goal for the Army to truly increase situational awareness and increase quicker decision making. All commanders need frequent chances to train. No one would expect the head of a surgical team to perform a heart-lung transplant without adequate training and preparation. Preparation includes education.

The Army should increase the educational opportunities for its commanders. These educational experiences should expose the commander to many different historical and practicable situations. The increase in training, education and experience will result in more intuitive behavior in decision making. Even though the armies he fought had not seen combat in over twenty years, Patton himself studied his craft so that when the time came he would not fall short.

Commanders should focus the staff with his vision and intent. This emphasis on greater visualization of the commander should begin early so that commanders and staffs at the operational level

are familiar with it early in their careers and continue to improve the art as they progress in responsibility. This would ensure that both the commander and staff are more comfortable with the art and the need for detailed guidance should decrease.

The need for this increase in the commander to provide detailed guidance is partially the result of personnel turbulence. The US Army lives in a state of personnel turbulence. It should stabilize key staff officers in higher commands for a minimum of two years. Commanders and primary staff officers rarely serve for more than twelve months prior to one or the other changing assignments. In many cases this may be the first time they have served with each other. This requires the staff officer time to understand the information his commander requires in both the planning and decisionmaking process.

More controversial would be to allow increased latitude by commanders in selection of their staff officers. While some will argue this is cronyism, it exist at some levels in certain sub-communities of the Army already.<sup>79</sup> If commanders could pick

subordinates that are familiar with and understand how the commander thinks this has the potential increase the effectiveness of unit operations.

FSR 100-5 was a well written document that could be carried in the shirt pocket. It provided for the commander to drive the decisionmaking process. It was sufficiently detailed enough that the Army, largely consisting of non-professional soldiers won a World War. Our greater reliance on reserve units to conduct operations would seem to dictate that a concise doctrine such as FSR 100-5 may prove useful. If the Army is required to conduct a large mobilization in the future, an updated FSR 100-5 will serve as an outstanding document to allow the same success.

---

## ENDNOTES

<sup>1</sup> FM100-5 Field Service Regulation, Command and General Staff College Reprint, Fort Leavenworth, KS: CGSC Press, 1992.

<sup>2</sup> FM 101-5 dtd 1940 did not carry the designation of FSR. It is identified as such for clarity in the monograph only. Current doctrinal manuals are no longer FSRs but identified as "Field Manuals". They are referred to as "FM" in this monograph.

<sup>3</sup> FSR 100-5 was updated 15 June 1944, but the changes are minor and reflect no change in warfighting doctrine relevant to planning or command. FSR 101-5 was not updated until after the war.

<sup>4</sup> A new Final Draft of FM 100-5 was published in August 1997. Since it is still in the development stage it "CANNOT be used for reference or citation" (quote from cover of Final Draft). FM 100-5 published in 1993 is the current version as of this writing.

<sup>5</sup> FSR 100-5, pii.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> FM 100-5, Operations, (Washington, DC: Headquarters Department of the Army: 1993), iv-vi.

<sup>9</sup> FSR 100-5, 18.

<sup>10</sup> Ibid.

<sup>11</sup> FM 100-5, 2-11.

<sup>12</sup> FSR 100-5, 23.

<sup>13</sup> Ibid., p25.

---

<sup>14</sup> FSR 100-5,30.

<sup>15</sup> James P. Kahan, Robert D. Worley, Cathleen Stasz, Understanding Commanders' Information Needs, (The Rand Corporation, Santa Monica, CA: June 1989), 8-10.

<sup>16</sup> Peter M. Senge, The Fifth Discipline: The Art and Practice of the Learning Organization, (New York, NY: Doubleday, 1990), 71 & 364-365.

<sup>17</sup> Conversation with COL Mike Kain in author's office in Bell Hall 1995

<sup>18</sup> FSR 100-5, 25.

<sup>19</sup> Ibid., p25-27.

<sup>20</sup> Ibid., 25-27.

<sup>21</sup> Ibid.

<sup>22</sup> Ibid.

<sup>23</sup> James P. Kahan, Robert D. Worley, Cathleen Stasz, Understanding Commanders' Information Needs, (The Rand Corporation, Santa Monica, CA: June 1989), 8-10.

<sup>24</sup> FM 101-5, Staff Officers' Field Manual: The Staff and Combat Orders, (Washington, DC: Headquarters Department of War: 1940), 3.

<sup>25</sup> Ibid., p90.

<sup>26</sup> Ibid.

<sup>27</sup> Ibid., p91.

<sup>28</sup> See the earlier discussion on information needs that the Rand study identified.

<sup>29</sup> Oscar W. Koch with Robert G. Hays, G2: Intelligence for Patton. (Philadelphia Whitmore Publishing, 1971), 1.

---

<sup>30</sup> Ibid.

<sup>31</sup> Koch, 106.

<sup>32</sup> FM 101-5, Staff Organization and Operations, (Washington, DC: Headquarters Department of the Army: 1997), 3. 5-1.

<sup>33</sup> Mitchell M. Waldrop, Complexity: The Emerging Science at the Edge of Order and Chaos, (New York, NY: Touchstone, 1993), p.11.

<sup>34</sup> Ibid.

<sup>35</sup> The US Army has a long history in occupation and observer duties. Reconstruction, post WWI and WWII and duties in the Sinai are examples of these.

<sup>36</sup> Waldrop, p.11.

<sup>37</sup> George Forty, The Armies of George S. Patton, (London: Arms and Armour Press, 1996), 57

<sup>38</sup> Robert S. Allen, Lucky Forward: The History of Patton's Third Army, (New York: Vanguard Press, 1947), 14.

<sup>39</sup> See Allen, p14-16 and Brenton G. Wallace, Patton and His Third Army, (Nashville, TN: The Battery Press, 1981), 13. for more detailed description of the training phases.

<sup>40</sup> Allen 10-12

<sup>41</sup> Allen 13.

<sup>42</sup> Headquarters, Third US Army, After Action Report Command Group AAR, TUSA, 1. (Hereafter cited as TUSA) TUSA AAR is composed of three volumes.

<sup>43</sup> The four phases were: Phase I. Reorganization and adjustment of the Command Group. Phase II. Detailed tactical and logistical analysis of the operation. Phase III. Reception and training of subordinate units. Phase IV. Coordination of operational and logistics issues with higher and subordinate headquarters. TUSA

---

AAR Chapter I provides detailed review of specific actions to accomplish these efforts.

<sup>44</sup> Both the command group AAR and several authors including Forty, p77 and Allen provide detailed review of the of TUSA staff.

<sup>45</sup> H. Essame, Patton: A Study in Command (New York: Charles Scribner's Sons, 1974) 121. Also, Allen, 15 and 16.

<sup>46</sup> Floyd, J. Davis, "The Staff: Another Dimension of the Operational Level of War", US Army War College, Carlisle Barracks, PA: 1988, 105 and Forty 118-119.

<sup>47</sup> No author directly traces their association to Fort Riley. It seems improbable that the two would not have been familiar at Riley.

<sup>48</sup> Davis, 105 and Forty 118-119.

<sup>49</sup> Carlo D'Este, Patton: A Genius for War, New York Harper Collins 1995 discusses this and attributes it to Essame and Munch. The conclusion about Smith is my own based on my understanding of his influence on Eisenhower from multiple sources.

<sup>50</sup> TUSA AAR and Forty, 120.

<sup>51</sup> Koch, iv

<sup>52</sup> Davis, 105-106, and Paul D. Harkins, When the Third Cracked Europe. Harrisburg, PA: Stackpole Books, 1969., ii

<sup>53</sup> Of all the key players, Maddox is the one with the least information. Based on the available material and review of TUSA AAR's, I believe that Maddox spent more time focused on the planning with Harkins running current operations.

<sup>54</sup> Essame, 121.

<sup>55</sup> Omar N. Bradley, A Soldier's Story (New York: Henry Holt and Company. 1951), 473.

<sup>56</sup> Koch, 53-54.

<sup>57</sup> Koch, 54-55.

---

<sup>58</sup> TUSA Planning AAR provides not only Estimate No 1 complete, but the sketches used to show current and expected enemy dispositions through the breakout.

<sup>59</sup> D'Este

<sup>60</sup> FM 100-6, Information Operations, (Washington, DC: Headquarters Department of the Army: 1996), 1-11.

<sup>61</sup> Army Digitization Master Plan 1996: Executive Summary, (Washington, DC: Headquarters, Department of the Army 1996), accessed 23 October 1997/ available from <http://www.adp.army.mil/ADMP/1996/TOC.htm>; internet), 1-4.

<sup>62</sup> Koch, 147-148.

<sup>63</sup> Koch, 148, Allen and others also recount the event in a similar way.

<sup>64</sup> Koch, Allen, and Bereton all agree with the following analysis based on their individual recollections from their books.

<sup>65</sup> Koch, 149.

<sup>66</sup> TUSA AAR, Operational Directive Annex 1.

<sup>67</sup> Letter of Instruction No.1, dated 6 March 1944, TUSA Operational Directive Annex 1.

<sup>68</sup> TUSA Operational Directives are contained in their complete form in the AAR.

<sup>69</sup> Paul G.Munch "Patton's Staff and the Battle of the Bulge." Military Review, May 1990, 47.

<sup>70</sup> D'Este, 820.

<sup>71</sup> Koch. 81-88, and TUSA G2 Periodic updates in the TUSA AAR support this conclusion.

---

<sup>72</sup> D'Este, 301.

<sup>73</sup> Most staff officers at Army level are Colonels or Brigadier Generals. Third Army during Desert Storm and VII Corps during the same operation are evidence of this.

<sup>74</sup> James P. Kahan, Robert D. Worley, Cathleen Stasz, Understanding Commanders' Information Needs, (The Rand Corporation, Santa Monica, CA: June 1989), 8-10.

<sup>75</sup> FM 101-5. B-1-B-3.

<sup>76</sup> FM 100-6, p. 2-6.

<sup>77</sup> Ibid. p. 2-1.

<sup>78</sup> Webster, "Enhancing Battle Command with the Tools of the 21st Century, Functional Requirements of Force XXI Digitized Battle Command." I-35.

<sup>79</sup> The Ranger Regiment is just one example of this.

## BIBLIOGRAPHY

### BOOKS

- Allen, Robert S., Lucky Forward: The History of Patton's Third Army, New York: Vanguard Press, 1947.
- Blumenson, Martin, Patton: The Man Behind the Legend. New York: William Morrow and Company, 1985.
- \_\_\_\_\_. The Patton Papers. Volumes 1 and 2. Boston: Houghton Mifflin and Company, 1972.
- Bradley, Omar N., A Soldier's Story, New York: Henry Holt and Company, 1951, 473.
- D'Este, Carlo, Patton: A Genius for War, New York: Harper Collins Publishing, 1995.
- Eisenhower, Dwight, D., Crusade in Europe, New York, NY: DeCapo Press, 1983.
- Essame, Hubert., Patton: A Study in Command. New York: Charles Scribner and Sons, 1978.
- Forty, George, The Armies of George S. Patton, London: Arms and Armour Press, 1996.
- \_\_\_\_\_. Patton's Third Army at War, London: Arms and Armour Press, 1990.
- Harkins, Paul D., When the Third Cracked Europe. Harrisburg, PA: Stackpole Books, 1969.
- Koch, Oscar W. with Robert G. Hays, G2: Intelligence for Patton. Philadelphia Whitmore Publishing, 1971.
- Nye, Roger, H., The Patton Mind: The Professional Development of an Extraordinary Leader, Garden City Park, NY: Avery Publishing Group, 1993.
- Patton, George, S. Jr. War As I Knew It, Boston: Houghton Mifflin Company, 1947.

Phillips, Robert H., To Save Bastogne, New York, NY: Stein and Day, 1983.

Senge, Peter, M., The Fifth Discipline, The Art and Practice of the Learning Organization, New York, NY: Doubleday, 1990.

Waldrop, Mitchell, M., Complexity, The Emerging Science at the Edge of Order and Chaos, New York, NY: Touchstone, 1993.

Wallace, Brenton G., Patton and His Third Army, Nashville, TN: The Battery Press, 1981.

Williamson, Porter, B., Patton's Principles, Management System Consultant, Inc., Tucson, AZ: 1979.

#### **PAPERS**

Claflin, R.C., "The Operational Art as Practiced by General George Patton, Jr. During the Battle of the Bulge", US Naval War College, Newport, RI: 1994.

Davis, Floyd, J., "The Staff: Another Dimension of the Operational Level of War", US Army War College, Carlisle Barracks, PA: 1988.

Higgins, George A. "The Operational Tenets of Generals Heinz Guderian and George S. Patton, JR." Unpublished Research Paper, U.S. Army Command and General Staff College, Fort Leavenworth, KS: 1985

Kahan, James, P., Worley, Robert D., Stasz, Cathleen, "Understanding Commanders' Information Needs", The Rand Corporation, Santa Monica, CA: June 1989.

#### **ARTICLES**

Macgregor, Douglas A., "Initiative in Battle: Past and Future", Marine Corps Gazette, August 1996.

Munch, Paul G. "Patton's Staff and the Battle of the Bulge." Military Review, May 1990, pp. 46-54.

Rogers, Charles, T., "Intuition: An Imperative Command", Military Review, March 1994.

Webster, William, G., "Enhancing Battle Command with the Tools of the 21st Century, Functional Requirements of Force XXI Digitized Battle Command", CTC Quarterly Bulletin, Center for Army Lessons Learned, Fort Leavenworth, KS: 1995.

### **MILITARY PUBLICATIONS**

Army Digitization Master Plan 1996, Headquarters, Department of the Army, Washington, DC: 1996, accessed 23 October 1997/ available from <http://www.adp.army.mil/ADMP/1996/TOC.htm>; internet.

Cole, Hugh M. U.S. Army in World War II: The European Theater of Operations--The Ardennes: Battle of the Bulge. Washington, DC: Office of the Chief of Military History, United States Army, 1965.

FM 71-100, Division Operations, Headquarters, Department of the Army, Washington, DC: 1996.

FM 100-5, Field Service Regulations: Operations. Washington, DC: War Department, 1941.

FM 100-5, Operations, Headquarters, Department of the Army, Washington, DC: 1993.

FM 100-6, Information Operations, Headquarters, Department of the Army, Washington, DC: 1996.

FM 100-15, Corps Operations, Headquarters, Department of the Army, Washington, DC: 1996.

FM 101-5, Staff Organizations and Operations, Headquarters, Department of the Army, Washington, DC: 1997.

FM 101-5, Staff Officers' Field Manual, The Staff  
and Combat Orders, Washington, DC: War  
Department, 1940.

Third United States Army, "After Action Report,  
August 1944-May 1945, Volume I, Operations",  
June 1945.

Third United States Army, "After Action Report,  
August 1944-May 1945, Volume II, Operations",  
June 1945.